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NICKEL IN AUGUST 2004

Reported domestic consumption in August, on a daily average basis, was slightly less than that of July, according to the U.S. Geological Survey. Average daily nickel consumption of cathode, pellets, briquets, powder, and ferronickel for stainless steel was 67.8 metric tons per day (t/d), 2% greater than the 66.5 t/d for July 2004, but 11% less than the 76.2 t/d (revised) for August 2003. Consumption of >99.8% nickel metal to make superalloys (such as INCONEL 718 and WASPALOY) decreased 18% from July levels, on a daily average basis. Consumption to make corrosion-resistant, less stress-resistant nickel-base alloys (such as INCONEL 600 and Nickel 200) increased by 2%. Sales to plating companies averaged 28.6 t/d, about 16% greater than the July sales figure of 24.6 t/d.

On August 31, U.S. consumer stocks of cathode, pellets, briquets, and powder totaled 1,440 metric tons (t), 12% greater than the 1,290 t (revised) on July 31 and 3% greater than the 1,390 t reported for yearend 2003. Stocks in London Metal Exchange (LME) warehouses worldwide totaled 11,592 t on August 31, 16% greater than the 9,978 t on July 31.

The United States imported 77,000 t of primary nickel in the first 7 months of 2004, slightly less than the 77,400 t for the corresponding period of 2003. Trade data for August will appear in a subsequent report.

China moves to secure future supplies of nickel

Chinese demand for nickel has risen dramatically since 1998. Between 2002 and 2003, Chinese demand for primary forms of nickel increased about 33%, rising from an estimated 93.6 million tons (Mt) to 125 Mt (International Nickel Study Group, 2004). Demand weakened slightly in the first half of 2004, but, towards yearend, resumed its upward movement despite a hike in benchmark interest rates by the People's Bank of China (PBOC) on October 29. The PBOC—China's central bank—reportedly raised interest rates for the first time in 9 years in a bid to contain rapid monetary growth and inflationary pressures. Chinese demand for stainless steel and nickel, however, could be negatively affected if the PBOC raises interest rates further in a move to slow the country's burgeoning economy.

The Chinese stainless steel industry currently accounts for about 30% of the country's primary nickel demand. Chinese production of stainless steel has increased substantially since 1998 because of the mushrooming economy. China was the world's leading consumer of stainless steel in 2002, accounting for almost 20% of world stainless consumption. At least eight melt shop expansions or greenfield projects were underway in China in 2003 (Inco Limited, 2003).

China also has a large electroplating industry and a number of rechargeable battery manufacturers that use nickel. China's plating industry accounts for about 43% of the country's primary nickel demand. Several Chinese companies have greenfield joint ventures with foreign nickel suppliers, including the Kunshun nickel chemical plant near Shanghai and a state-of-the-art nickel foam project underway at Dalian.

To meet the significant projected growth in demand for nickel, several Chinese companies have moved to secure future supplies at a time when demand for nickel is growing globally. In recent months, Chinese companies have been in close contact with their counterparts in several key nickel-rich countries, including Australia, Canada, Cuba, and Papua New Guinea.

Update

Australia.—On November 18, WMC Resources Ltd. and the Jinchuan Group Ltd. announced the formation of a joint venture company to explore for nickel and copper in Gansu and other western provinces of China. WMC already has two contracts to supply Jinchuan—China's leading nickel producer—with a total of 120,000 t of nickel-in-matte from its Kalgoorlie smelter between 2005 and 2010 (WMC Resources Ltd., 2004).

Canada.—In September, China Minmetals Corporation offered to buy Noranda Inc., a leading Canadian mining company. Noranda, in turn, owns almost 59% of Falconbridge Ltd., the third largest producer of refined nickel in the world. In 2003, Falconbridge recovered 104,000 t of nickel—a record high for the company and about 9% of world supply. Falconbridge has major nickel production operations in Canada (Ontario), the Dominican Republic, and Norway. Minmetals is in the process of transforming itself from a trading-oriented organization into a broadly based resource company. Noranda

executives rejected the initial Chinese offer, but negotiations were still continuing on a non-exclusive basis (Noranda Inc., 2004).

Cuba.—On November 22 and 23, a delegation from China, led by its president, met with Cuban leaders to discuss expanding bilateral cooperation in a number of political, economic, and technological areas. The visit of the Chinese president to Havana concluded a four-nation tour of Latin America. China is already Cuba's third largest trading partner, after Venezuela and Spain. China reportedly accounts for about 10% of Cuba's foreign trade and mainly imports nickel and sugar.

During the 2 days of discussions, the Chinese Government agreed to invest $500 million in Cuba's nickel industry. The agreement was only one of 16 business agreements forming joint ventures in agriculture, biotechnology, light industry, telecommunications, and tourism. As part of the agreement, Cuba would supply China with 4,000 metric tons per year (t/yr) of nickel from 2005 to 2009. In a televised address, the president of Cuba said that the new Chinese investment would allow Cuba to double nickel production to 150,000 t/yr from its current level of 75,000 t/yr. Cuba would retain a 51% ownership in each of the companies created with Chinese capital.

One of the nickel projects being evaluated was completion of the partially constructed Las Camariocas mine and plant. It may be possible to convert the unfinished ammonia leach operation to ferronickel production, but the construction site near Moa has been idle for more than a decade. Cubaniquel,[1] the state-owned monopoly, would have a 51% interest in the Las Camariocas project, while Minmetals would have a 49% interest. Construction of a greenfield mine and plant at San Felipe (Camaguey Province) or at Pinares de Mayari West (Holguin Province) could easily use the entire $500 million (Rodriguez, 2004).

Papua New Guinea.—On February 10, 2004, China Metallurgical Construction (Group) Corp. signed a preliminary agreement with Highlands Pacific Ltd. of Australia to develop the Ramu nickel project in Madang Province of Papua New Guinea. China Metallurgical, a Chinese Government-owned mining equipment and construction company, would acquire an 85% interest in the $650 million project. Highlands Pacific currently has a 68.5% interest in the Ramu project, while Mineral Resources Development Co., a unit of the Papua New Guinea Government, has the remaining 31.5%. Neither of the existing stakeholders would be required to put any new investment into the project. Negotiations were still in progress in October 2004, according to the Prime Minister of Papua New Guinea (Reuters Limited, 2004).

The Ramu project has 42 Mt of measured resources averaging 0.93% Ni and 0.11% cobalt (Co) plus 30 Mt of indicated resources averaging 1.07% Ni and 0.11% Co, using a cutoff grade of 0.5% Ni. The proposed laterite mining complex would produce 33,000 t/yr of nickel and 3,200 t/yr of cobalt either as metal or contained in a high-grade intermediate product for sale to a suitable smelter or refiner (Highlands Pacific Ltd., 2004§[2]).

[1]Cubaniquel provides marketing and export services for the parastatal producer Union de Niquel.

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[2]A reference that includes a section mark (§) is found in the Internet Reference Cited section.

TABLE 1
CONSUMPTION OF NICKEL (EXCLUSIVE OF SCRAP), BY FORM AND USE[1]

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total	Total year to date
2003:					
August	4,320	873	27 r	5,220	40,800
September	4,320	844	28	5,190	46,000
October	4,840	911	32	5,780	51,800
November	4,470 r	1,190	30	5,690 r	57,500 r
December	4,130	902	30	5,060	62,500
January-December	53,500 r	8,620	412	62,500	XX
2004:					
January	4,290	595	34	4,920	4,920
February	4,940	455	26	5,420	10,300
March	5,010	529	34	5,580	15,900
April	4,660	458	52	5,170	21,100
May	5,250	528	27	5,810	26,900
June	5,210	556	39	5,800	32,700
July	4,890	536	43	5,470	38,200
August:					
Steel:					
Stainless and heat resisting	1,430	677	W	2,100	16,300
Alloy (excludes stainless)	W	--	--	W	W
Superalloys	816	--	W	816	7,630
Copper-nickel alloys	W	--	--	W	W
Electric, magnetic, and expansion alloys	13	--	--	13	118
Other nickel & nickel alloys	W	--	W	W	W
Cast iron	W	--	--	W	W
Electroplating (sales to platers)	886	--	--	886	7,130
Chemical and chemical uses	W	--	--	W	W
Other uses	1,540	--	36	1,570	12,400
Total reported	4,680 [2]	677	36	5,390	43,600
Total all companies (calc)[3]	XX	XX	XX	9,470	76,500
2004: January-August	38,900	4,330	293	43,600	XX
2003: January-August	35,700	4,770	293	40,800	XX

[r]Revised. W Withheld to avoid disclosing company proprietary data; included in "Other uses" category. XX Not applicable. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Of consumption, 3,740 metric tons were consumed as cathodes and pellets, the remainder as briquets and powder.

[3]Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (56.93%) to apparent primary consumption for 2002.

TABLE 2
ENDING STOCKS OF NICKEL (EXCLUSIVE OF SCRAP) HELD BY CONSUMERS, BY FORM AND USE [1, 2]

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total
2003:				
August	1,670	140	51	1,860
September	1,280	99	52	1,430
October	1,360	109	60	1,530
November	1,410	227	59	1,690
December	1,390	260	46	1,700
2004:				
January	1,390	186	55	1,630
February	1,660	111	44	1,810
March	1,630	108	40	1,780
April	1,760	227	34	2,020
May	1,360	158	42	1,560
June	1,450	185	45	1,680
July	1,290 r	147	30	1,470 r
August:				
Steel (stainless, heat resisting and alloy)	564	119	(3)	683
Nonferrous alloys[4]	862	(3)	(3)	862
Foundry (cast irons)	(3)	(3)	--	(3)
Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses	15	20	42	77
Total	1,440	139	42	1,620

rRevised. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Stocks held by companies that consume nickel in more than one end use category are credited to the major category. Stocks are subject to revisions owing to inventory adjustments.

[3]Included in the "Chemical and unspecified uses" category.

[4]Includes superalloys, nickel-copper and copper-nickel alloys, permanent magnet alloys, and other nickel alloys.

TABLE 3
CONSUMPTION AND ENDING STOCKS OF PURCHASED SECONDARY NICKEL, BY USE[1]

(Metric tons, nickel content)

	Consumption			Stocks		
Period	Ferrous scrap[2]	Nonferrous scrap[3]	Total scrap	Ferrous scrap[2]	Nonferrous scrap[3]	Total scrap
2003:						
August	4,770	749	5,520	3,310	115	3,430
September	3,810	732	4,540	3,290	108	3,400
October	5,350	756	6,110	3,110	101	3,210
November	4,960	668	5,620	2,950	97	3,050
December	4,930	647	5,580	2,810	85	2,900
January-December	57,600	8,330	65,900	XX	XX	XX
2004:						
January	5,050	698 r	5,750 r	2,700	73	2,770
February	4,780	708 r	5,490 r	2,710	79	2,790
March	5,520	937 r	6,460 r	3,270	80	3,350
April	5,280	865 r	6,140 r	2,950	82	3,030
May	5,210	801 r	6,010 r	2,730	63	2,790
June	5,090	804 r	5,890 r	2,750	85	2,830
July	4,850	675 r	5,520 r	2,640	76	2,720
August	5,010	952	5,970	2,410	74	2,480
January-August	40,800	6,440	47,200	XX	XX	XX

rRevised. XX Not applicable.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Nickel content is calculated from an average nickel content and the reported gross weight of scrap.

[3]Combined consumption and stocks of aluminum-base, copper-base, and nickel-base scrap.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF NICKEL, BY COUNTRY[1]

(Metric tons, nickel content)[2]

Period and country of origin	Cathodes pellets, and briquets	Powder and flakes	Ferro-nickel	Metal-lurgical-grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total[3]	Total year to date[4]	Wrought nickel
2003:										
July	6,240	294	1,840	11	352	420	312	9,470	83,000	49
August	7,420	762	913	(5)	477	475	544	10,600	93,600	62
September	9,990	1,030	1,180	(5)	570	744	248	13,800	107,000	48
October	7,270	565	1,010	20	326	715	255	10,200	118,000	34
November	7,030	625	932	--	318	889	324	10,100	128,000	28
December	6,230	860	471	(5)	530	821	284	9,190	137,000	34
January-December	99,300	9,130	13,100	90	4,790	6,690	3,790	137,000	XX	660
2004:										
January	7,360	829	1,040	40	489	933	435	11,100	11,100	77
February	7,200	834	1,070	161	667	1,020	485	11,400	22,600	49
March	10,700	812	806	134	1,430	1,660	376	15,900	38,400	72
April	10,700	720	1,680	23	574	908	296	14,900	53,400	53
May	8,530	564	941	--	698	680	381	11,800	65,200	55
June	9,190	732	978	--	553	680	324	12,500	77,600	86
July:										
Australia	326	20	--	--	5	--	--	351	5,890	--
Brazil	--	--	--	--	7	--	--	7	1,430	--
Canada	3,400	428	--	--	222	453	(5)	4,500	39,700	--
Colombia	--	--	236	--	--	2	--	238	1,800	--
Dominican Republic	--	--	735	--	--	--	--	735	4,620	--
Finland	180	40	--	--	--	1	108	329	3,860	--
France	79	--	--	--	64	--	40	183	1,260	(5)
Germany	(5)	27	--	--	36	--	61	124	1,320	23
Japan	--	14	--	--	4	--	36	54	551	6
Mexico	--	--	--	--	4	158	2	164	1,430	--
New Caledonia	--	--	100	--	--	--	--	100	650	--
Norway	1,760	--	--	--	8	--	--	1,770	8,840	--
Russia	1,610	220	--	--	--	--	--	1,830	11,800	--
South Africa	--	60	--	--	--	--	--	60	539	--
Sweden	--	2	--	--	--	--	--	2	38	--
United Kingdom	3	77	--	--	152	--	14	246	2,100	3
Venezuela	--	--	--	--	1	38	--	39	367	--
Zimbabwe	20	--	--	--	--	--	--	20	541	--
Other	1	26	--	--	121	11	113	272	1,900 [6]	49
Total	7,370	914	1,070	--	624	663	374	11,000	88,600	81
2004: January-July	61,000	5,400	7,580	357	5,040	6,540	2,670	88,600	XX	470
2003: January-July	61,300	5,290	8,590	70	2,570	3,040	2,140	83,000	XX	452

XX Not applicable. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

[3]Excludes wrought nickel.

[4]May include revisions for prior months.

[5]Less than 1/2 unit.

[6]All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF NICKEL, BY COUNTRY[1]

(Metric tons, nickel content)[2]

Period and country of destination	Cathodes pellets, and briquets	Powder and flakes	Ferro-nickel	Metal-lurgical-grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total[3]	Total year to date	Wrought nickel
2003:										
July	87	95	27	2	510	3,570	393	4,690	33,200	148
August	56	77	37	1	792	3,040	301	4,300	37,500	162
September	107	106	18	51	707	2,350	223	3,560	41,100	148
October	133	153	12	4	1,010	3,270	276	4,850	45,900	141
November	210	127	1	5	819	1,600	371	3,130	49,000	102
December	44	92	10	4	809	3,190	441	4,590	53,600	72
January-December	996	1,100	181	161	9,460	37,800	3,900	53,600	XX	2,890
2004:										
January	52	129	15	5	657	2,370	399	3,630	3,630	153
February	85	166	--	17	540	2,550	396	3,750	7,380	54
March	116	150	(4)	8	1,000	3,800	497	5,570	12,900	59
April	144	132	3	8	1,070	2,660	563	4,570	17,500	227
May	54	127	23	4	1,290 r	3,100	323	4,920	22,400	120
June	187	138	3	4	1,310	4,720	567	6,930	29,400	65
July:										
Australia	--	--	--	--	--	--	1	1	7	2
Belgium	--	1	--	--	--	5	(4)	6	191	--
Canada	2	12	--	--	961	162	236	1,370	8,660	9
China	--	34	--	--	--	1,140	12	1,180	5,480	9
Finland	--	--	--	--	18	575	--	593	3,690	(4)
Germany	--	13	--	--	44	6	4	67	506	2
India	--	(4)	--	--	--	133	--	133	1,170	1
Italy	--	4	--	(4)	--	3	3	10	46	1
Japan	2	3	--	2	37	17	26	87	653	4
Korea, Republic of	--	11	(4)	--	--	135	14	160	5,520	1
Mexico	14	1	--	(4)	--	4	35	54	657	51
Netherlands	--	14	--	--	--	33	1	48	970	1
South Africa	--	--	--	--	--	--	(4)	(4)	27	--
Spain	--	--	--	--	--	7	(4)	7	320	--
Sweden	--	33	--	--	32	--	--	65	236	--
Taiwan	--	5	--	--	--	199	15	219	2,200	3
United Kingdom	--	5	--	--	56	(4)	7	68	704	1
Other	--	35	--	--	7	189	119	350	2,750	15
Total	18	171	(4)	2	1,160	2,610	473	4,420	33,800	100
2004:January-July	657	1,010	44	47	7,020	21,800	3,220	33,800	XX	778
2003:January-July	447	541	103	95	5,330	24,400	2,280	33,200	XX	2,260

rRevised. XX Not applicable. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

[3]Excludes wrought nickel.

[4]Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF NICKEL ALLOYS, BY COUNTRY[1]

(Metric tons, gross weight)

Period and country of origin	Unwrought alloyed ingot	Bars, rods and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
2003:									
July	130	266	554	277	30	305	168	1,730	10,900
August	151	78	469	319	32	322	154	1,530	12,400
September	48	239	406	211	10	115	95	1,120	13,500
October	204	307	443	305	15	162	95	1,530	15,000
November	195	239	331	210	23	89	156	1,240	16,300
December	314	169	388	215	45	704	147	1,980	18,300
January-December	1,910	2,520	5,750	3,330	214	2,770	1,770	18,300	XX
2004:									
January	102	278	286	193	14	134	133	1,140	1,140
February	165	214	362	251	8	374	238	1,610	2,750
March	102	167	446	213	18	363	459	1,770	4,520
April	345	255	504	164	44	773	172	2,260	6,770
May	124	270	494	131	14	231	115	1,380	8,150
June	227	344	517	301	40	136	100	1,670	9,820
July:									
Australia	112	--	--	--	--	--	--	112	456
Belgium	15	--	(2)	--	--	--	--	15	79
Canada	1	--	1	--	--	3	1	6	120
China	--	--	5	1	--	--	27	33	231
France	--	31	59	5	--	18	5	118	902
Germany	69	100	190	176	32	107	4	678	4,480
Italy	--	76	(2)	--	--	1	1	78	960
Japan	--	--	4	1	--	3	(2)	8	558
Mexico	--	--	--	--	--	--	13	13	290
Netherlands	--	--	--	--	--	--	13	13	108
South Africa	20	--	--	--	--	--	--	20	202
Sweden	--	67	230	8	--	--	(2)	305	1,890
United Kingdom	36	43	8	(2)	--	6	2	95	715
Other	18	4	8	1	--	2	21	54	378
Total	271	321	505	192	32	140	87	1,550	11,400
2004: January-July	1,340	1,850	3,110	1,450	170	2,150	1,300	11,400	XX
2003: January-July	996	1,490	3,720	2,070	90	1,380	1,130	10,900	XX

XX Not applicable. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF NICKEL ALLOYS, BY COUNTRY[1]

(Metric tons, gross weight)

Period and country of destination	Unwrought alloyed ingot	Bars, rods and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
2003:									
July	750	553	72	223	25	263	216	2,100	15,700
August	708	707	112	344	30	228	201	2,330	18,000
September	597	623	80	281	52	140	271	2,040	20,100
October	206	802	55	396	55	255	253	2,020	22,100
November	274	621	121	382	49	254	208	1,910	24,000
December	379	571	69	350	107	203	199	1,880	25,900
January-December	6,660	7,960	1,190	3,960	661	2,420	3,050	25,900	XX
2004:									
January	522	731	155	366	9	118	231	2,130	2,130
February	543	777	155	343	15	172	299	2,300	4,440
March	980	640	92	491	30	184	333	2,750	7,190
April	283	649	99	472	22	144	303	1,970	9,160
May	457	976	168	334	46	119	543	2,640	11,800
June	511	722	130	427	33	170	272	2,270	14,100
July:									
Australia	58	(2)	3	6	--	1	1	69	186
Belgium	31	228	13	2	--	--	1	275	1,320
Canada	159	51	14	23	4	41	26	318	1,700
China	3	5	(2)	46	(2)	1	31	86	651
France	123	224	2	27	(2)	3	1	380	2,160
Germany	14	58	3	13	5	11	5	109	681
India	6	1	1	4	--	(2)	(2)	12	57
Ireland	--	--	(2)	1	--	--	2	3	14
Italy	85	42	(2)	13	--	(2)	3	143	746
Japan	88	71	3	4	(2)	1	(2)	167	1,920
Korea, Republic of	(2)	15	3	36	--	2	10	66	682
Mexico	3	23	66	43	1	27	113	276	1,770
Netherlands	--	3	2	4	--	(2)	22	31	201
Singapore	--	11	1	2	--	3	(2)	17	78
Spain	(2)	(2)	--	1	(2)	--	1	2	44
Sweden	--	--	9	17	--	--	(2)	26	100
Switzerland	4	1	10	5	(2)	8	(2)	28	154
Taiwan	--	2	--	31	(2)	2	3	38	270
United Kingdom	23	256	15	24	(2)	6	3	327	2,320
Other	17	111	32	48	1	26	22	256	1,640
Total	614	1,100	177	350	11	132	244	2,630	16,700
2004: January-July	3,910	5,600	975	2,780	165	1,040	2,220	16,700	XX
2003: January-July	4,500	4,640	750	2,200	368	1,340	1,920	15,700	XX

XX Not applicable. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 8
NICKEL CONSUMPTION IN CAST AND WROUGHT PRODUCTS

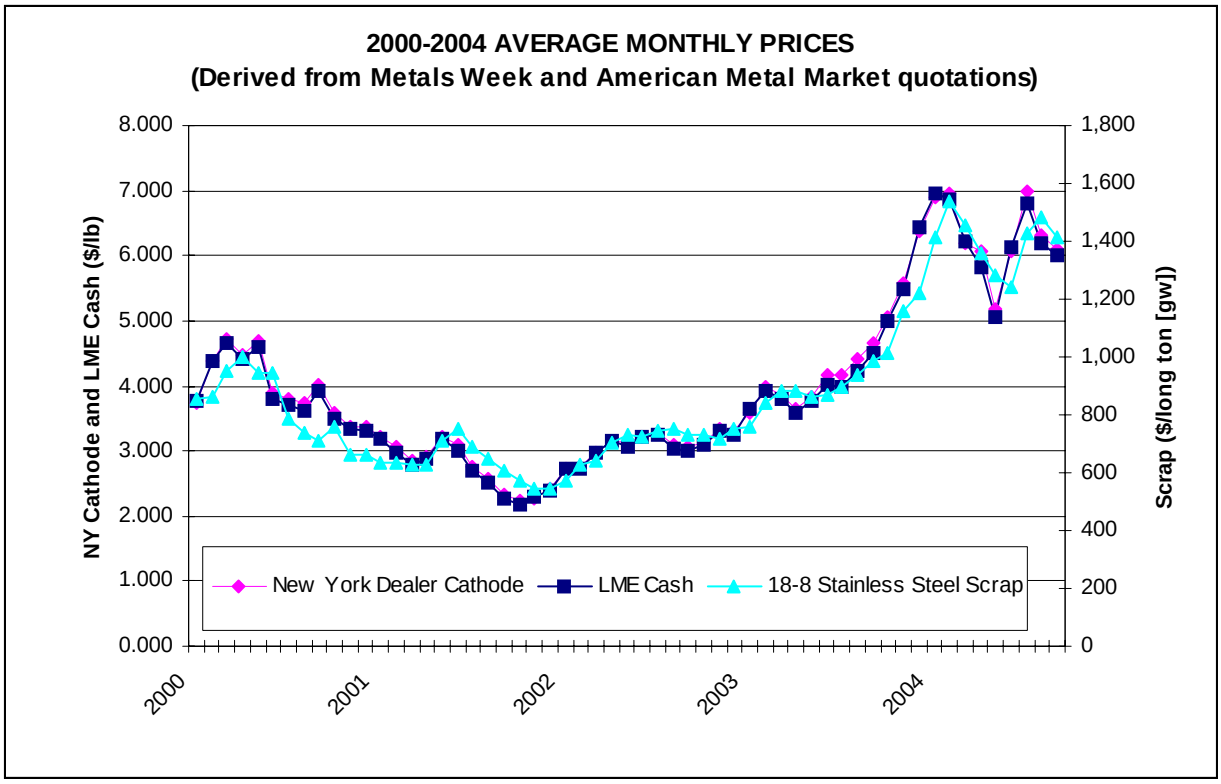
	Percent	
	Wrought	Cast
August 2004:		
Stainless and heat resisting steels	65	35
Alloy steels	99	1
Superalloys	87	13
Copper-nickel alloys	94	6
Other nickel-base alloys	100	(1)

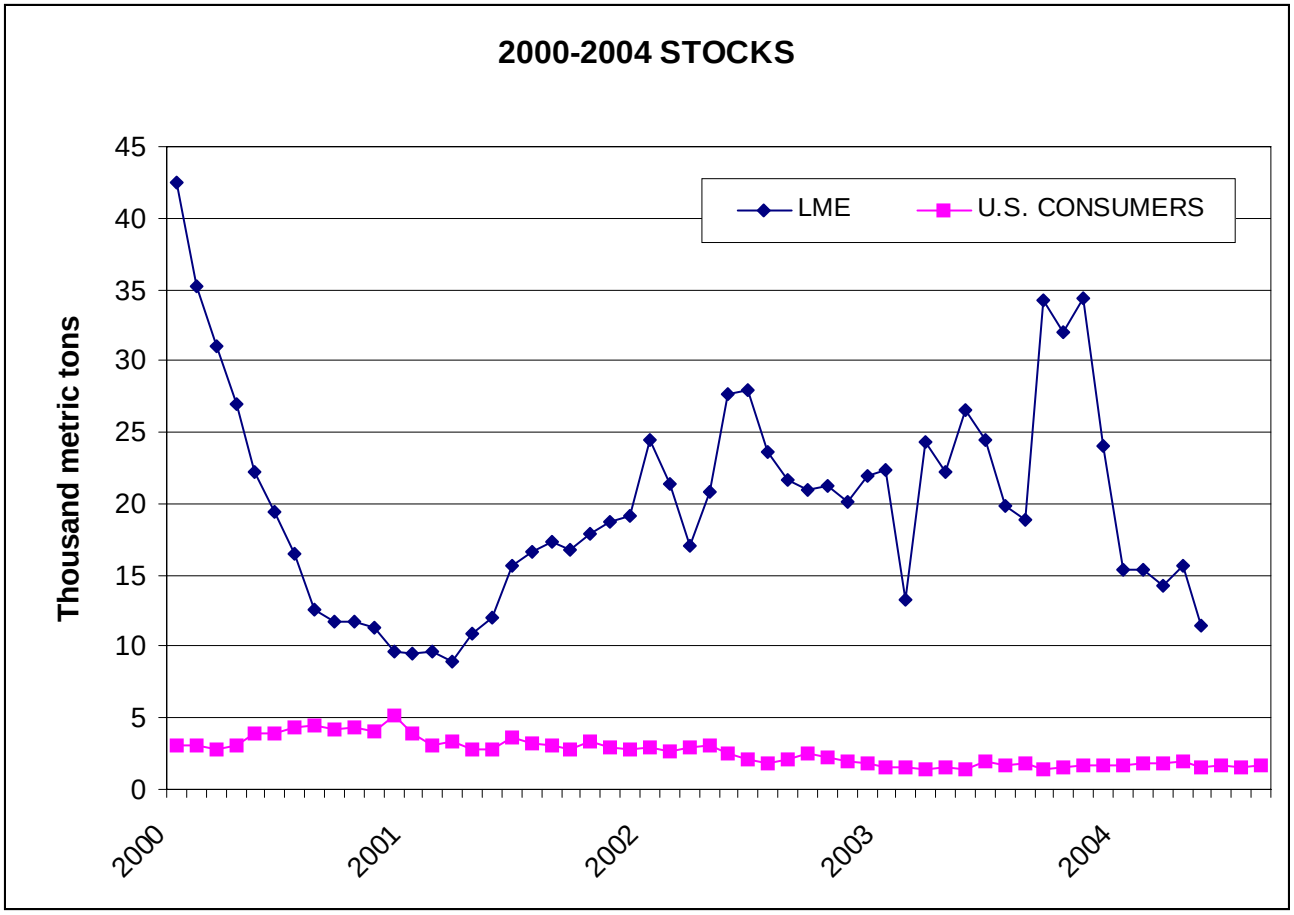
[1]Less than 1/2 unit.

TABLE 9
NICKEL PRICES

Date	Platts Metals Week: Cathode NY Dealer $/lb.	Platts Metals Week: LME Cash mean[1] $/t	Platts Metals Week: LME Cash mean[1] $/lb.	Platts Metals Week: 18/8 Stainless steel scrap Free market $/long ton (gw)	American Metal Market, 18/8 Stainless steel scrap Pittsburgh $/long ton (gw)
2003:					
Average for month of:					
September	4.668	9,965.341	4.520	978	985
October	5.066	11,047.174	5.011	1,041	1,013
November	5.568	12,086.500	5.482	1,153	1,160
December	6.390	14,162.500	6.424	1,262	1,222
Yearly average	4.446	9,629.469	4.368	961	942
2004:					
Average for week ending:					
July 2	7.01-7.10	14,945.500	6.779	1,350-1,400	1,200-1,215 [r]
July 9	7.18-7.52	15,768.000	7.152	1,375-1,425	1,440-1,460
July 16	7.17-7.45	15,209.000	6.899	1,450-1,465	1,440-1,460
July 23	7.02-7.18	14,867.000	6.744	1,450-1,465	1,440-1,460
July 30	6.57-6.87	14,231.000	6.455	1,450-1,465	1,440-1,460
August 6	6.44-6.67	13,780.500	6.251	1,450-1,465	1,550-1,570
August 13	6.26-6.52	13,522.000	6.133	1,530-1,600	1,550-1,570
August 20	6.27-6.70	14,071.000	6.382	1,425-1,475	1,550-1,570
August 27	6.31-6.74	13,491.000	6.119	1,425-1,475	1,550-1,570
September 3	6.01-6.31	12,738.125	5.778	1,425-1,475	1,460-1,480
September 10	5.74-5.94	12,285.000	5.572	1,425-1,475	1,460-1,480
September 17	5.83-6.24	12,790.000	5.801	1,350-1,400	1,460-1,480
September 24	6.10-6.79	13,911.500	6.310	1,350-1,400	1,460-1,480
Average for month of:					
January	6.900	15,326.548	6.952	1,517	1,463
February	6.968	15,145.125	6.870	1,537	1,585
March	6.203	13,715.000	6.221	1,458	1,563
April	6.056	12,848.125	5.828	1,397	1,503
May	5.185	11,118.289	5.043	1,281	1,367
June	6.063	13,533.523	6.139	1,241	1,208
July	6.990	15,023.295	6.814	1,430	1,402
August	6.320	13,679.524	6.205	1,481	1,560
September	6.112	13,270.909	6.020	1,405	1,470

[r]Revised.
[1]Mean of the cash buyer price and the cash seller and settlement price.


2000-2004 AVERAGE MONTHLY PRICES
(Derived from Metals Week and American Metal Market quotations)
NY Cathode and LME Cash ($/lb)
Scrap ($/long ton [gw])
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
New York Dealer Cathode
LME Cash
18-8 Stainless Steel Scrap
2000
2001
2002
2003
2004


2000-2004 STOCKS
Thousand metric tons
45
40
35
30
25
20
15
10
5
0
LME
U.S. CONSUMERS
2000
2001
2002
2003
2004